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**Relationship between colorimetric (instrumental) evaluation and consumer-defined beef
colour acceptability**

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ABSTRACT

The relationship between instrumental colorimetric values (L^* , a^* , b^* , the ratio of reflectance at 630 nm and 580 nm) and consumer perception of acceptable beef colour was evaluated using a web-based survey and standardised photographs of beef *m. longissimus lumborum* with known colorimetrics. Only L^* and b^* were found to relate to average consumer opinions of beef colour acceptability. Respondent nationality was also identified as a source of variation in beef colour acceptability score. Although this is a preliminary study with the findings necessitating additional investigation, these results suggest L^* and b^* as candidates for developing instrumental thresholds for consumer beef colour expectations.

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